

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Lin Zhi et al.

Art Unit : 1623

Serial No.: 10/080,503

Examiner: Lawrence E. Crane, Ph.D.

Filed

: February 22, 2002

Cust. No. : 20985

Conf. No.: 8671

Title

: TRICYCLIC QUINOLINONE AND TRICYCLIC QUINOLINE ANDROGEN

RECEPTOR MODULATOR COMPOUNDS AND METHODS

Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT IN **ACCORDANCE WITH 37 C.F.R. §§ 1.97-1.98**

This Supplemental Information Disclosure Statement accompanies a Response to the Office Action mailed July 29, 2004. Because this Supplemental Information Disclosure Statement is filed after the receipt of a First Office Action on the Merits for the abovecaptioned application, a check for the filing fee of \$180.00 is enclosed. If no proper payment is enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1050.

In accordance with the duty of disclosure imposed by 37 C.F.R. §1.56 to inform the Patent Office of all references known by Applicant or Applicant's representative that may be material to the examination of the subject application, Applicant's representative hereby provides this Information Disclosure Statement that is prepared in accordance with 37 C.F.R. §§1.97-1.98. Forms PTO-1449 (3 pages) and copies of the cited non U.S. Patent documents are provided herewith.

With the exception of items AK, AL, BA and BD, the documents cited on the Form PTO-1449 are in the English language. German Patent Application No. DE 2427409 (item AK), which is in the German language, is provided with an English language equivalent, US

> CERTIFICATE OF MAILING BY "EXPRESS MAIL" "Express Mail" Mailing Label Number EV 399317608 US Date of Deposit January 31, 2005 I hereby certify that this paper is being deposited with the United States Postal "Express Mail Post Office to Addressee" Service under 37 CFR \$1/10 on the date indicated above and is addressed to: Commissioner for Patents, U.S. Patent and Trademark Office. P.O. Box 1450; Alexandria, VA, 22313-1450.

Stephanic L. Seldman

Applicant: Lin Zhi et al. Attorney's Docket No.: 18202-018001 / 1082

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Patent No. 3,919,238 (item AB). Japanese Patent Application No. 50-25595 (item AL), with is in the Japanese language, is provide with an English language abstract (item AU). The publication by Lancelot et al. (item BA), which is in the French language, is provided with an English language abstract on the first page of the article. Lastly, Ohta et al (item BD) is in the Japanese language. Hence, in accordance with the requirements of 37 C.F.R. §1.98, as amended effective March 16, 1992, no further explanation of the listed items is necessary.

Applicant also makes known to the Examiner the following pending U.S. and International Applications that have one or more common inventors and/or are commonly owned:

Docket No.	U.S.S.N.	Filed	Publ. No.
007002/1033B	09/277,405	03/26/99	n/a
033001/1051	09/463,542	01/21/00	n/a
017001/1081	10/080,926	02/22/02	20020183346
018001/1082	10/080,503	02/22/02	20020183314
051001/1814	10/211,969	08/01/02	n/a
013002/1062B	10/238,363	09/09/02	20030186970
014002/1066B	10/329,307	12/23/02	20030149268
005003/1028C	10/360,580	02/05/03	20040019072
016002/1077B	10/435,520	05/09/03	20040049072
020001/1088	10/684,229	10/10/03	20040152718
057001/1091	10/684,227	10/10/03	20040147530
003014/1014N	10/739,933	12/17/03	20040186132
002007/1002F	08/141,246	10/22/93	n/a
002009/1002H	08/141,496	10/22/93	n/a
004002/1026B	08/484,487	06/07/95	n/a
004003/1026C	10/847,732	05/17/04	2004-0209839
036006/1031F	09/496,514	02/02/00	n/a
035002/1059B	10/229,649	08/27/02	2003-0013766
013002/1062B	10/238,363	09/09/02	2003-0186970
017001/1081	10/080,926	02/22/02	2002-0183346
048001/1087	10/684,212	10/10/03	2004-0152717

Docket No.	Intl. No.	Filed	Publ. No.
057WO1/1091PC	PCT/US03/24416	08/04/03	WO2004/033459
020WO1/1088PC	PCT/US03/24419	08/04/03	WO2004/033460
048WO1/1087PC	PCT/US03/24420	08/04/03	WO2004/033461
022WO1/1096PC	PCT/US04/022907	07/16/04	Awaiting
023WOI/1097PC	PCT/US04/023788	07/16/04	Awaiting
024WQ1/1098PC	PCT/US04/023093	07/16/04	Awaiting
026WO1/1100PC	PCT/US04/023010	07/16/04	Awaiting
030WO1/1111PC	PCT/US04/027483	08/23/04	Awaiting

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Although these documents are made known to the Patent and Trademark Office in compliance with Applicant's duty of disclosure, such disclosure is not to be construed as an admission by Applicant or Applicant's representative that any of the references, singly or in any combination thereof, is effective as prior art against the subject application. In accordance with 37 C.F.R. §1.97(h), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. §1.56(b) exists.

Applicant respectfully requests that the Examiner review the foregoing references and they be made of record in the file history of the above-captioned application.

Respectfully submitted,

Attorney's Docket No.: 18202-018001 / 1082

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Telephone: (858) 678-5070 Facsimile: (202) 626-7796 email: seidman@fr.com

Substitute For (Modified)	m PTQ-1449		partment of Commer t and Trademark Offi			Application No. 10/080,50	
		d Publications n Disclosure St		Applicant Lin Zhi et al.			
(37 CFR §1.98	(b))			Filing Date February 22, 2	002	Group Art Unit	
			U.S. Pate	nt Documents	•		
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
•	AA	2002/0183346	12/05/02	Zhi ct al.	514	291	02/22/02
	AB	3,919,238	11/11/75	Spencer et al.	260	288	06/06/73
	AC	5,576,324	11/19/96	Kyotani et al.	514	291	10/27/94
	AD	5,696,130	12/09/97	Jones et al.	514	291	06/05/95
	AE	6,017,924	01/25/00	Edwards et al	514	292	08/12/99
	AF	6,180,794	01/30/01	Edwards et al.	546	152	10/15/99

Examiner	Desig.	Document	Publication	ublished Foreign Country or			Trans	slation
Initial	ID ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AG	0 638 571	04/28/93	·EP, A1	-			
	AH	00/12502	03/09/00	PCT	·		·····	
	AI	02/066475	08/29/02	PCT				
	Į,	02/068427	09/06/02	PCT				·
	ΑK	24 27 409	01/09/75	DE (DT), A1	•		·	Х*
	AL	50-25595	03/18/75	JP			<u> </u>	X*
	AM	96/19458	06/27/96	PCT				<del> </del>

X\*= An English language abstract or equivalent is provided.

	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
	AN	Bolognese et al., "Photochemistry of Ommochrome Pigments," J. Heterocyclic Chem. 25: 1243-1246 (1988)
	AO	Bolognese et al., "Oxidation of 3-Hydroxykynurenine. A Reexamination,", "J. Heterocyclic Chem. 25: 1247-1250 (1988)
	ĄР	Bolognese et al., "Photochemistry of Ommochromes and Related Compounds," J. Heterocyclic Chem. 25: 979-983 (1988)
	AQ	Boyer, M., "The management of prostrate cancer," Aust. Prescr. 19:22-24 (1996) http://www.australianprescriber.com/magazines/vol19nol/ap19-1-11.htm (accessed on 01/28/2005)
	AR	Bush et al., "Sample-distance Partial Least Squares: PLS optimized for many variables, with application to CoMFA," Journal of Computer-Aided Molecular Design 7(5): 587-619 (1993)
	AS	Castillo, P. and J.C. Rodriguez-Ubis, "A high-yield method for the methylenation of odihydroxyaromatic compounds: synthesis of methylenedioxycoumarins," Synthesis pp. 839-840 (1986)

Examiner Signature	Date Considered
EXAMINER: Initial if citation considered, whether or not citation is in conformance and not considered. Include copy of this form with next co	onformance with MPEP 609; Draw line through citation if not in
	The state of the s

Sheet 2 of 3

Substitute For (Modified)	m PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 18202-018001 / 1082	Application No. 10/080,503
List of P	atents and	d Publications for Applicant's n Disclosure Statement	Applicant Lim Zhi et al.	
(37 CFR §1.98(b))			Filing Date February 22, 2002	Group Art Unit 1623
(3) CFK 91.5	Other Do	cuments (include Author,	Title, Date, and Place	of Publication)
Examiner	Desig.			
Initial	ID	67	Document (1000) Marketon	hamical receion in qualight
	AT	Chemical Abstracts vol. 54, no.8821, Experiments with benzo[k]quinoline-sunlight and in dark," J. A. Chem. So	5,6-quinone, monoamine and n c. 81:3409-3413 (1959)	nonoxmine derivatives in
	ΑŬ	Chemical Abstracts vol. 83, no.17903 "9-Halothiazoloquinolines"		
	AV	Claman et al., "SOGC clinical practic Gynaecol Can. 24(1):62-7 (2002)		•
	AW	Debenedetti et al., "Isopurasol, a cour 703 (1999)		
	AX	Ishii et al., "Formation of Hydroxanti Hydroxykynurenine," Archives of Bi	ochemistry and Biophysics 29-	4(2): 616-622 (1992)
	AY	Tetrahedron Letters 39: 4995-4998 (1998)  Kawamori et al., "Effects of heterocyclic amines with mammary gland carcinogenic potential on estrogenic response of uterus in ovariectomized rats," Cancer Letters 162: 31-37 (2001)  Lancelot et al., "Pyrido[2,3-h]pyrrolo[1,2-a]quinoxalines," Chem. Pharm. Bull. 31: 3160-3167 (1983) [Article in French, English abstract on first page of article]		
	AZ			
	ВА			
· ·	BB	LaMontagne et al., "Antimalarials. 1. Chem. 25: 964-968 (1982)		·
•	BC	McIlroy et al., "Effects of proteinase (1980)		
	BD	Ohta et al., "Juvenile hormone antag Japanese]	<u> </u>	
	BE	Singh et al., "Androgen receptor ante Med. Chem. 7(2): 211-247 (2000)	•	
	BF	Sperry et al., "Farnesol oxidation in hormone is mediated by a specific al 31(2): 171-178 (2001)	cohol oxidase," Insect Biocher	mistry and Molecular Biology
	BG	STN CAPLUS Abstract Database At in a series of angular pyrroloquinolis	nes," Zhumal Organicheskoi K	<u>himii 17(7): 1542-1546 (1981)</u>
•	ВН	STN CAPLUS Abstract Database Acthieno [3,2-f]quinoline," Journal of t (1970)	he Chemical Society, Section	C: Organic (17): 2334-2339
	ВЈ	STN CAPLUS Abstract Database Approlo-, thienopyrrolo-, and benzoth Zeitschrift fuer Naturforschung B: C	ienopymoloquinolines as well hemical Sciences 53(10): 1216	as of triazoloindole derivatives, 5-1222 (1998)
	ВЈ	STN CAPLUS Abstract Database A derivatives as potential antineoplasti (2000)	c drugs," Bioorganic & Medic	inal Chemistry 8(6): 1415-1422
	ВК	STN CAPLUS Abstract Database A pyrrolo [2,3-f-]-3H-pyrrolo[3,2-f]qu Sel/skokhozyaistvennoi Akademii (3	inoline and their derivatives,"	

Examiner Signature	Date Considered			
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Substitute Fon (Modified)	m PTO-144	9 U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 18202-018001 / 1082	Application No. 10/080,503
		d Publications for Applicant's n Disclosure Statement	Applicant Lin Zhi et al.	
(37 CFR §1.98	(a))		Filing Data February 22, 2002	Group Art Unit 1623
		ocuments (include Author,	Title, Date, and Place	of Publication)
Examiner Initial	Desig. ID		Document	
IIIIIIIIII	BL.	STN CAPLUS Abstract Database Accorded restragements; regions elective sy Chemical Research, Synopses (9): 31	cession No. 128:3621, Majumd nthesis of pyrrolo [3,2-f]quino	
·	ВМ	STN CAPLUS Abstract Database Accession No. 73:73505, Saksena et al., "Androgenic, antiandrogenic, and anabolic activity of azasteroids on immature castrated rats," Indian J. Med. Res. 58(4): 513-518 (1970)		
·	ВN	STN CAPLUS Abstract Database Accession No. 87:5939, SU 548608 published 02/28/77, entitled "Pytroloquinoline derivatives".		
	ВО	STN CAPLUS Abstract Database Accession No. 71:81325, SU 241441 published 04/18/69, emitted "2-Methyl-3-(.betaaminoethyl-1H-pyrrolo [2,3-b]quinoline or 1-(betaaminoethyl)-2-methyl-3H-pyrrolo [3,2-f]quinoline,"		
	BP	STN CAPLUS Abstract Database Accepyrroloquinolones," Khimiya Geterot	cession No. 99:38395, Yamash siklicheskikh Soedinenii (4): 4	kin et al., "Synthesis of 93-497 (1983)
	BQ	STN CAPLUS Abstract Database Ac. 6-, and 7- (enamino) indoles in the sy Compounds (New York) [Translation 1065 (1998)	cession No. 131:213835, Yarna nthesis of pyrroloquinolines,"	shkin et al., "Reactivities of 5-, Chemistry of Heterocyclic
·	BR	STN CAPLUS Abstract Database Accession No. 56:38406, Yoshikawa et al., "Synthesis of 4,6-diaminoquinoline derivatives. I. Synthesis of pyrrolo [f] quinoline derivatives," Yakugaku Zasshi 81: 1317-1322 (1961)		
	BS	STN CAPLUS Abstract Database Ac Khimiya Geterotsiklicheskikh Soedin	enii (10): 1381-1385 (1979)	
·	вт	Willard et al., "Potential Diuretio-β-A Dimethylethyl)amino]-1-hydroxyethy (1981)	Adrenergic Blocking Agents: S	

Examiner Signature	Date Considered		
EXAMINER: Initial if citation considered, whether or not citation is in co	onformance with MPEP 609; Draw line through citation if not in		
conformance and not considered, Include copy of this form with next communication to applicant.			